

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) **12 OCT 2004**

Applicant's or agent's file reference

**FOR FURTHER ACTION**

See paragraph 2 below

030036U1WO

International application No.

International filing date (day/month/year)

Priority date (day/month/year)

PCT/US04/13202

30 April 2004 (30.04.2004)

05 April 2004 (05.04.2004)

International Patent Classification (IPC) or both national classification and IPC

IPC(7): H04Q 7/20 and US Cl.: 455/456

Applicant

QUALCOMM INCORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US

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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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Box No. V Reasoned statement under Rule 43 *bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>NONE</u>	YES
	Claims <u>1-37</u>	NO
Inventive step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-37</u>	NO
Industrial applicability (IA)	Claims <u>1-37</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and explanations:

Please See Continuation Sheet

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

Claims 1-37 lack novelty under PCT Article 33(2) as being anticipated by Stein et al. (US 2003/0008669 A1).

As to claim 1, a method comprising: receiving information in a wireless communication system (Fig. 1A), the information being indicative of signals of a set of base stations that a repeater can detect in the wireless communication system (col. 1, [0004]); and updating a neighbor list based on the received information (col. 5, [0049], and col. 9, [0108]).

As to claim 2, the method of claim 1, further comprising causing the updated neighbor list to be sent to one or more subscriber units of the wireless communication system. (col. 5, [0057]).

As to claim 3, the method of claim 1, wherein the information identifies a set of phase offsets detected from the signals of the set of base stations (col. 5, [0057]).

As to claim 4, the method of claim 1, wherein the information includes identification codes detected from the signals of the set of base stations (col. 5, [0051-0055]).

As to claim 5, the method of claim 1, wherein the wireless communication system comprises a code division multiple access (CDMA) system and the information identifies pseudo-random noise (PN) offsets (col. 4, [0046], and col. 7 [0073]).

As to claim 6, a method executed in a repeater of a wireless communication system, the method comprising: identifying signals associated with a set of base stations that the repeater can detect (col. 4, [0041]); and sending information indicative of the set of base stations to a specific base station that is repeated by the repeater (col. 4, [0042-0043]).

As to claim 7, the claim lack novelty for the same reason as set forth in claim 3.

As to claim 8, the claim lack novelty for the same reason as set forth in claim 4.

As to claim 9, the claim lack novelty for the same reason as set forth in claim 5.

As to claim 10, the method of claim 6, further comprising identifying energy levels of the signals and sending information indicative of the energy levels (col. 7, [0073]).

As to claim 11, the method of claim 6, further comprising identifying pilot symbols of the signals and sending information indicative of the identified pilot symbols (col. 10, [0110-0112]).

As to claim 12, a computer readable medium comprising computer readable instructions that when executed in a device of a

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wireless communication system (col. 12, [0135]), cause the device to update a neighbor list based on information received from a repeater in the wireless communication system, the information being indicative of signals of a set of base stations that the repeater can detect (col. 12, [0136-0144]).

As to claim 13, the computer readable medium of claim 12, further comprising instructions that when executed cause the device to send the updated neighbor list to one or more subscriber units of the wireless communication system (col. 12, [0144-0145]).

As to claim 14, the claim lack novelty for the same reason as set forth in claim 3.

As to claim 15, the claim lack novelty for the same reason as set forth in claim 4.

As to claim 16, the claim lack novelty for the same reason as set forth in claim 5.

As to claim 17, a computer readable medium comprising computer readable instructions that when executed in a repeater of a wireless communication system, cause the repeater to: identify signals associated with a set of base stations that the repeater can detect (col. 14, [0041]); and send information indicative of the set of base stations to a specific base station that is repeated by the repeater (col. 4, [0042-0043]).

As to claim 18, the claim lack novelty for the same reason as set forth in claim 3.

As to claim 19, the claim lack novelty for the same reason as set forth in claim 4.

As to claim 20, the claim lack novelty for the same reason as set forth in claim 5.

As to claim 21, a device of a wireless communication system, the device comprising: a receiver to receive information in the wireless communication system, the information being indicative of signals from a set of base stations that a repeater can detect in the wireless communication system (col. 5, [0057-0060]); and a control unit to update a neighbor list based on the received information (col. 5, [0049], and col. 9, [0108]).

As to claim 22, the claim lack novelty for the same reason as set forth in claim 13.

As to claim 23, the claim lack novelty for the same reason as set forth in claim 3.

As to claim 24, the claim lack novelty for the same reason as set forth in claim 4.

As to claim 25, the claim lack novelty for the same reason as set forth in claim 5.

As to claim 26, a repeater of a wireless communication system comprising a control unit to identify signals associated with a set of base stations that the repeater can detect and cause the repeater to send information indicative of the set of base stations to a specific base station that is repeated by the repeater (col. 5, [0057-0060]).

As to claim 27, the claim lack novelty for the same reason as set forth in claim 3.

As to claim 28, the claim lack novelty for the same reason as set forth in claim 4.

As to claim 29, the claim lack novelty for the same reason as set forth in claim 5.

As to claim 30, a wireless communication system comprising: a repeater that identifies signals associated with a set of base stations that the repeater can detect, and sends information indicative of the set of base stations that the repeater can detect (col. 5, [0057-0060]); and a device that receives the information and updates a neighbor list based on the information (col. 9, [0108]).

As to claim 31, the claim lack novelty for the same reason as set forth in claim 3.

As to claim 32, the claim lack novelty for the same reason as set forth in claim 4.

As to claim 33, the claim lack novelty for the same reason as set forth in claim 5.

As to claim 34, a device of a wireless communication system comprising: means for receiving information in the wireless communication system, the information being indicative of signals from a set of base stations that repeater can detect in the wireless communication system (col. 5, [0057-0060]); means for storing a neighbor list; and means for updating the neighbor list based on the received information (col. 4,

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[0041-0046]).

As to claim 35, the claim lack novelty for the same reason as set forth in claim 13.

As to claim 36, a repeater of a wireless communication system comprising: means for identifying signals associated with a set of base stations that the repeater can detect (col. 5, 0057-0060); and means for sending information indicative of the set of base stations to a specific base station that gets repeated by the repeater (col. 4, [0042-0043]).

As to claim 37, the claim lack novelty for the same reason as set forth in claim 5.